

IN THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

1. (currently amended) Apparatus for locating an interventional device relative to the ostium of a branch vessel, comprising:

a sheath having proximal and distal ends, and a lumen extending therebetween, the sheath adapted to be affixed to an interventional device; and

an ostial locator wire slidably disposed within the sheath, the ostial locator wire having a distal region that assumes an expanded configuration when extended from the distal end of the sheath and partially encircles the interventional device and a linear configuration when retracted into the lumen, the sheath being advanceable with the distal region in the expanded configuration to position the interventional device relative to the ostium, the ostial locator wire and sheath being removable after positioning the interventional device.

2. (original) The apparatus of claim 1, further comprising a fastener for affixing the sheath to the interventional device.

3. (original) The apparatus of claim 2, wherein the fastener comprises a thin flexible sheet configured to wrap around the interventional device.

4. (original) The apparatus of claim 2, wherein the fastener comprises a clasp.

5. (original) The apparatus of claim 4, wherein the clasp is adapted to be snap-fit or friction-fit into engagement with the interventional device.

6. (original) The apparatus of claim 4, wherein the clasp is adapted to be affixed to the interventional device using a biocompatible adhesive.

7. (original) The apparatus of claim 1, wherein the expanded configuration has a diameter larger than a diameter of the ostium of the branch vessel.

8. (original) The apparatus of claim 7 wherein a section of the distal region that assumes the expanded configuration assumes a spiral shape.

9. (original) The apparatus of claim 7 wherein a section of the distal region that assumes the expanded configuration defines a portion of a disk, coil, sphere, cone, amphora or petalled-arrangement.

10. (original) The apparatus of claim 1, wherein the ostial locator wire further comprises an atraumatic tip.

11. (original) The apparatus of claim 1, wherein the ostial locator wire further comprises a tip having a lasso that assists in retaining the expanded configuration centered on the interventional device.

12. (original) The apparatus of claim 8, wherein the interventional device is a stent delivery catheter includes a stent, and the spiral shape at least partially encircles the stent.

13. (original) The apparatus of claim 1, wherein the expanded configuration flattens out upon being urged into contact with tissue surrounding the ostium of the branch vessel.

14. (original) The apparatus of claim 12 wherein a distal-most turn of the expanded configuration has a diameter substantially the same as a diameter of the interventional device encircled by the distal region, so as to retain the expanded configuration centered on the interventional device.

15. (original) The apparatus of claim 1, wherein the distal region further comprises a radiopaque feature.

16-22. (canceled)

23. (new) An apparatus for locating an interventional device relative to the ostium of a branch vessel, comprising:

an interventional device comprising a stent deployable within an ostium;

a sheath having proximal and distal ends, and a lumen extending therebetween; and

an ostial locator slidably disposed within the lumen of the sheath, the ostial locator having a distal region that assumes an expanded configuration when extended from the distal end of the sheath and partially encircles the stent, the ostial locator being removable after deploying the stent within the ostium.

24. (new) The apparatus of claim 23, wherein the interventional device comprises a balloon, the stent being mounted on the balloon.

25. (new) The apparatus of claim 23, wherein the ostial locator comprises a wire that assumes the expanded configuration when extended from the sheath and a linear configuration when retracted into the lumen.

26. (new) The apparatus of claim 23, wherein the distal region assumes a shape in the expanded configuration that is flattened out when the sheath is advanced into an ostium, thereby providing tactile feedback regarding the position of the distal region.

27. (new) The apparatus of claim 23, wherein the interventional device further comprises a delivery catheter for delivering the stent into the ostium.

28. (new) The apparatus of claim 27, wherein the delivery catheter is affixed to the sheath such that the distal end of the sheath is proximal to the stent.

29. (new) An apparatus for locating an interventional device relative to the ostium of a branch vessel, comprising:

a sheath having proximal and distal ends, and a lumen extending therebetween; and
an ostial locator extendable from the lumen of the sheath, the ostial locator comprising a distal region that assumes an expanded configuration when extended from the distal end of the sheath and partially encircles the interventional device, the distal region assuming a shape in the expanded configuration that is flattened out when the sheath is advanced into an ostium, thereby providing tactile feedback regarding the position of the distal region.

30. (new) The apparatus of claim 29, wherein the distal region comprises a three-dimensional shape in the expanded configuration before being flattened out.

31. (new) The apparatus of claim 30, wherein the three-dimensional shape comprises one of a coil, sphere, disk, cone, amphora, and petalled-arrangement that is flattened when the distal region abuts tissue surrounding the ostium.

32. (new) The apparatus of claim 29, wherein the ostial locator comprises a stop that prevents the ostial locator from being extended from the sheath more than a distance needed to fully deploy the distal region.

33. (new) The apparatus of claim 29, further comprising a stent, the distal region partially encircling the stent in the expanded configuration for positioning the stent relative to the ostium.